ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

2000 Cost Ceilings

SUPPLEMENTAL UNIT RATES

	OOI I ELIMENTAE ONTI NATES		
	PERSONNEL RATES		
1	Professional Services Rates: Principal Level	\$/Hour	\$120
2	Professional Services Rates: Senior Level	\$/Hour	\$103
3	Professional Services Rates: Project Level	\$/Hour	\$88
4	Professional Services Rates: Staff Level	\$/Hour	\$74
5	Professional Services Rates: Field Level	\$/Hour	\$62
6	Professional Services Rates: Technical Personnel (CAD,	\$/Hour	\$55
7	Professional Services Rates: Administrative Assistant	\$/Hour	\$45
8	Professional Services Rates: Word Processor (Computer	\$/Hour	\$39
	CONSTRUCTION/CONTRACTING PERSONNEL RATES	_	
9	Construction/Contracting Services Rates: Construction Field	\$/Hour	\$78
10	Construction/Contracting Services Rates: Skilled Labor	\$/Hour	\$49
11	Construction/Contracting Services Rates: Unskilled Labor	\$/Hour	\$39
12	Construction/Contracting Services Rates: Equipment	\$/Hour	\$58
	Operator (Avg. Rate to Operate a Std. Piece of Equip)		
	PER DIEM RATES		
13	Per Diem Requirement (# Miles Required)	# Miles	92
14	Fieldwork Per Diem Without Overnight Stay	\$/Day	\$38
15	Fieldwork Per Diem With Overnight Stay (Incl. Lodging)	\$/Day	\$103

CONSULTANT MILEAGE RATE

16	Consultant Mileage Rate (single person)	\$/Mile	\$2
17	Consultant Mileage Rate (two persons)	\$/Mile	\$4
	PROJECT SET-UP AND ADMINISTRATION		
18	Initial Project Set-up	Lump Sum	\$982
19	Previously Assessed Project Review	Lump Sum	\$1,812
20	Agency Data Analysis	Lump Sum	\$1,535
21	Site Reconnaissance and Field Receptor Survey [1/4 Mile]	Lump Sum	\$1,560
22	Agency Receptor Survey [1/4 Mile]	Lump Sum	\$983
23	Historical Research	Lump Sum	\$1,319
24	Pursuit of Off-Site Access Agreement with a Private Entity	Lump Sum	\$1,220
	WORK PLAN PREPARATION		
25	Approved Site Characterization Work Plan Scenario 1: Soil	\$/Report	\$3,852
26	Approved Site Characterization Work Plan Scenario 2: Soil	\$/Report	\$5,038
27	Initial Health and Safety Plan	\$/Report	\$681
	REMEDIAL PLANS		
28	ADEQ-Approved CAP for Active Remedial Treatment	Per CAP	\$6,867
29	ADEQ-Approved CAP for Natural Attenuation	Per CAP	\$6,644
30	Pre-Built Remedial Engineering Design	Per Design	\$5,790
31	Consultant Preparation of SAF Work Plan to Implement	Per Plan	\$3,686
32	Remediation Health & Safety Plan	Per Plan	\$1,116
	FIELD ACTIVITIES		

33	Field Activity: Day Rate	Per Day	\$1,192
34	Consultant's Half Day Rate	Per Half Day	\$771
	CONTRACTOR UST REMOVAL AND CLOSURE		
35	Contractor Mob/Demob	Per Event	\$696
36	Contractor Mob/Demob Incremental Travel Rate	Per Mile	\$5
37	Contractor Daily Travel Costs	Per Mile	\$ 5
	UST REMOVAL		
38	One UST Less than or Equal to 4,000-gallons	Per Tank	\$5,852
39	Cost for Each Additional Tank	Per Tank	\$2,978
40	One UST Greater than 4,000-gallons and Less than or Equal to	Per Tank	\$11,183
41	Cost for Each Additional Tank	Per Tank	\$5,722
42	One UST Greater than 15,000-gallons	Per Tank	\$12,838
43	Cost for Each Additional Tank	Per Tank	\$7,988
	OFF-SITE TRANSPORTATION OF TANKS		
44	One UST Less Than or Equal to 4,000-gallons	Per Mile	\$4
45	Cost for Each Additional Tank	Per Mile	\$3
46	One UST Greater than 4,000-gallons and Less than or Equal to	Per Mile	\$7
47	Cost for Each Additional Tank	Per Mile	\$6
48	One UST Greater than 15,000-gallons	Per Mile	\$13
49	Cost for Each Additional Tank	Per Mile	\$12
	CONTRACTOR DRILLING-RELATED ACTIVITIES - SOIL BORING AND SAMPLING MOB/DEMOB		
50	Hollow Stem Auger Drilling Method	Per Event	\$498

51	All other Drilling Methods	Per Event	\$591
	SOIL BORING AND SAMPLING TRAVEL RATE		
52	Hollow Stem Auger Drilling Method	Per Mile	\$4
53	All other Drilling Methods	Per Mile	\$5
54	Soil Boring and Sampling Travel Rate	Per Mile	\$4
	SOIL BORING AND SAMPLING		
55	Hollow Stem Auger Drilling Method-Vertical Boring	Per Foot	\$22
56	Hollow Stem Auger Drilling Method-Angle Boring	Per Foot	\$28
57	Limited Access Drilling Method-Vertical Boring	Per Foot	\$36
58	Air Rotary Drilling Method-Vertical Boring	Per Foot	\$38
59	Rotosonic Drilling Method-Vertical Boring	Per Foot	\$42
60	Dual Wall Percussion Drilling Method-Vertical Boring	Per Foot	\$40
61	Dual Wall Percussion Drilling Method-Angle Boring	Per Foot	\$58
62	Soil Boring Abandonment by Grout [all boring diameters]	Per Foot	\$10
	CONTRACTOR STANDBY RATE		
63	Hollow Stem Auger	Per Hour	\$176
64	All Other Rig Types	Per Hour	\$264
	CONTRACTOR WELL INSTALLATION-RELATED ACTIVITIES -		
65	2 inch Hollow Stem Auger	Per Foot	\$38
66	4-inch Hollow Stem Auger	Per Foot	\$47
67	6-inch Hollow Stem Auger	Per Foot	\$65
68	2-inch Air Rotary	Per Foot	\$54
69	4-inch Air Rotary	Per Foot	\$63

70	6-inch Air Rotary	Per Foot	\$84
71	2-inch Rotosonic	Per Foot	\$61
72	4-inch Rotosonic	Per Foot	\$64
73	6-inch Rotosonic	Per Foot	\$79
74	2-inch Dual Wall Percussion	Per Foot	\$56
75	4-inch Dual Wall Percussion	Per Foot	\$67
76	6-inch Dual Wall Percussion	Per Foot	\$86
77	Surface Completion / Access Manhole <= 12"	\$/Well	\$297
78	Surface Completion / Access Manhole >12" to <=24"	\$/Well	\$501
	CONTRACTOR MONITOR WELL DEVELOPMENT-RELATED		
79	Contractor Mob/Demob	Per Event	\$483
80	Contractor Travel Cost	Per Mile	\$3
81	2-inch Monitor Well: Depth to Water Less Than 100 Feet	\$/Well	\$468
82	2-Inch Monitor Well: Depth to Water Equal To or Greater Than	\$/Well	\$581
83	4-Inch Monitor Well: Depth to Water Less Than 100 Feet	\$/Well	\$506
84	4-Inch Monitor Well: Depth to Water Equal To or Greater Than	\$/Well	\$610
85	6-Inch Monitor Well: Depth to Water Less Than 100 Feet	\$/Well	\$621
86	6-Inch Monitor Well: Depth to Water Equal To or Greater Than	\$/Well	\$716
	GROUNDWATER MONITORING AND SAMPLING - RELATED		
87	Consultant Make Ready	Per Event	\$314
88	Groundwater Monitoring Field Equipment Day Rate [Purging]	Per Day	\$648
89	Groundwater Monitoring Field Equipment Day Rate [Non-	Per Day	\$465
90	2-inch Monitor Well: Depth to Water Less Than 100 Feet	\$/Well	\$424
91	2-Inch Monitor Well: Depth to Water Equal To or Greater Than	\$/Well	\$549
92	4-Inch Monitor Well: Depth to Water Less Than 100 Feet	\$/Well	\$521

93	4-Inch Monitor Well: Depth to Water Equal To or Greater Than	\$/Well	\$642
94	6-Inch Monitor Well: Depth to Water Less Than 100 Feet	\$/Well	\$700
95	6-Inch Monitor Well: Depth to Water Equal To or Greater Than	\$/Well	\$839
96	Investigative Sampling Methodology [Purging is not required]	\$/Well	\$321
97	Consultant Fluid Level Monitoring	\$/Well	\$198
98	Free Product Removal Via Hand Bailing or Hand Pumping	\$/Well	\$486
99	Free Product Removal Via Dedicated Removal Device	\$/Well	\$568
	PILOT AND FEASIBILITY TESTING		
100	Aquifer Pump Test	Per Event	\$8,762
101	Aquifer Slug Test	Per Event	\$4,093
102	Soil Vapor Extraction Test	Per Event	\$6,626
103	SVE/Air Sparge Test	Per Event	\$8,731
104	Bioremediation Test	Per Event	\$8,331
	REMEDIATION ACTIVITIES		
105	Remedial Excavation	Per Cubic	\$11
106	Bulk Soil Transportation	Per Ton	\$18
107	Backfill and Compaction Excavation Costs	\$/Ton	\$20
108	Containerized Contaminated Water Disposal	Per Drum	\$134
109	Containerized Contaminated Soil Disposal	Per Drum	\$308
110	Waste Characterization	Per Event	\$1,265
111	Landfill Disposal of Petroleum Contaminated Soil (PCS)	\$/Ton	\$38
112	Thermal Remediation of PCS (Ex-Situ, On-Site, Portable	\$/Ton	\$52
113	Thermal Remediation of PCS (Ex-Situ, Off-Site, Fixed Facility)	\$/Ton	\$33
114	Bioremediation of PCS (Off-Site, Fixed Facility)	\$/Ton	\$35

115 116	Construction and Installation of Soil and/or Groundwater Consultant Cost: Remediation System Operation and	Per Event [1] Per Month	Bid \$2,073
	REPORTING ACTIVITIES		
117	14-Day Release Confirmation Report	Per Report	\$533
	ADEQ-APPROVED STANDARD SITE CHARACTERIZATION REPORT		
118	ADEQ-Approved Standard Site Characterization Report; Up To	\$/Report	\$4,035
119	ADEQ-Approved Standard Site Characterization Report;	\$/Boring	\$281
120	ADEQ-Approved Standard Site Characterization Report; Up To	\$/Report	\$5,014
121	ADEQ-Approved Standard Site Characterization Report;	\$/Well	\$310
	Incremental Cost Increase Per Groundwater Monitor Well		
122	ADEQ-Approved Standard Site Characterization Report; Up to	\$/Report	\$5,818
	(4) Soil Borings and (4) Groundwater Monitor Wells		
	REMEDIAL REPORTS		
123	First Periodic Groundwater Monitoring Report: Up Through 4	\$/Report	\$2,379
124	Initial Periodic Monitoring Report; Incremental Cost for Each	Per Well	\$177
125	Subsequent Groundwater Monitoring Report: Up Through 4 Wells (Covers subsequent sampling events)	\$/Report	\$1,573
126	Subsequent Periodic Monitoring Report; Incremental Cost for Each Additional Groundwater Monitor Well	Per Well	\$154
127	Initial Remedial Progress Report (Soil and Groundwater)	\$/Papart	\$2,755
128	Subsequent Remedial Progress Report (Soil and	\$/Report \$/Report	\$2,755
129	Post Remediation Closure Report	\$/Report	\$3,680
130	Site De-Commissioning Letter Report	-	\$3,680
130	Site De-Commissioning Letter Report	\$/Report	⊅1,∠//

SAF APPLICATION PREPARATION

131	SAF Application Preparation Cost: Pre-approval Application	Per	\$969
132	Reimbursement/Direct Pay Application [Less than or Equal to	Per	\$890
133	Reimbursement/Direct Pay Application [3 to 5 Primary	Per	\$1,072
134	Reimbursement/Direct Pay Application [6 to 10 Primary	Per	\$1,304
	EQUIPMENT RENTAL RATES		
135	SVE System with Thermal Oxidizer (100 cfm)	\$/Month	\$3,120
136	SVE System with Thermal Oxidizer (250 cfm)	\$/Month	\$3,834
137	SVE System with Thermal Oxidizer (500 cfm)	\$/Month	\$4,439
138	SVE System With Thermal Oxidizer [700 cfm]	\$/Month	\$5,337
139	SVE System with Catalytic Oxidizer (100 cfm)	\$/Month	\$3,156
140	SVE System with Catalytic Oxidizer (250 cfm)	\$/Month	\$4,071
141	SVE System with Catalytic Oxidizer (500 cfm)	\$/Month	\$4,834
142	Air Sparge System [up to 100 cfm and up to 12 psi]	\$/Month	\$981
143	Air Sparge System [up to 100 cfm and 13 psi to 100 psi]	\$/Month	\$1,236
144	SVE/Air Sparge Portable Pilot Test Unit	\$/Day	\$2,423
145	Blower, 160 CFM	\$/Month	\$1,007
146	Blower, 280 CFM	\$/Month	\$1,290
147	Manual-Operated Hand Auger Sampling Kit (Hand Auger/Brass	\$/Day	\$65
148	50 Gallon DOT-approved Drum	\$/Drum	\$57
LABORATORY RATES			
	MOBILE LABORATORY RATES		
149	Mobile Lab Mob/Demob Rate for One Person Crew	Per Event	\$543

150	Mobile Lab Mob/Demob Rate for Two Person Crew	Per Event	\$378
151	Mobile Lab Incremental Travel Rate for One Person Crew	Per Mile	\$2
152	Mobile Lab Incremental Travel Rate for Two Person Crew	Per Mile	\$2
153	LAB ANALYSIS: On-Site Mobile Lab Rate for One Person Crew	\$/Hour	\$168
154	LAB ANALYSIS: On-Site Mobile Lab Rate for Two Person Crew	\$/Hour	\$251
	ORGANIC ANALYSIS		-
155	Total Petroleum Hydrocarbons (TPH) by 418.1 AZ (Soil Only)	\$/Sample	\$69
156	TPH by ADHS Method 8015AZR1(Soil Only)	\$/Sample	\$91
157	TPH by ADHS Method 8015AZR1-Modified (Air Only)	\$/Sample	\$103
158	TPH/BTEX by EPA Method 8015 AZR1(Modified]/8021B (Air	\$/Sample	\$125
159	Aromatic VOC's (BTEX) Method 8021B (Soil Only)	\$/Sample	\$91
160	Halogenated VOC's (BTEX) Method 8021B Arizona Target	\$/Sample	\$131
161	Method 8021B; Arizona Target Compounds (Soil Only)	\$/Sample	\$155
162	Full List VOC's Method 8021B (Soil Only)	\$/Sample	\$202
163	Aromatic VOC's (BTEX) Method 8021B (Groundwater Only)	\$/Sample	\$95
164	Halogenated VOC's (BTEX) Method 8021B Arizona Target	\$/Sample	\$136
165	Method 8021B; Arizona Target Compounds (Groundwater	\$/Sample	\$160
166	Full List VOC's Method 8021B (Groundwater Only)	\$/Sample	\$196
167	Aromatic VOCs (BTEX) by EPA 8021B (Air Only)	\$/Sample	\$138
168	Halogenated VOCs Method 8021B Arizona Target Compounds	\$/Sample	\$172
169	Method 8260B; Arizona Target Compounds (Soil Only)	\$/Sample	\$216
170	Full List Volatile Organics by EPA Method 8260B (Soil Only)	\$/Sample	\$231
171	Method 8260B; Arizona Target Compounds (Groundwater	\$/Sample	\$218
172	Full List Volatile Organics by EPA Method 8260B	\$/Sample	\$232

	POLYNUCLEAR AROMOATIC HYDROCARBONS (PAHs)		
173	Semi-Volatile Organics (PAHs) by EPA Method 8270C (Soil	\$/Sample	\$226
174	Semi-Volatile Organics (PAHs) by EPA Method 8270C	\$/Sample	\$244
175	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method	\$/Sample	\$170
176	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method	\$/Sample	\$169
	WASTE CHARACTERIZATION ANALYSIS		
177	TPH by EPA Method 418.1 (Groundwater Only) - FOR WASTE	\$/Sample	\$73
	CHARACTERIZATION AND PERMIT REQUIREMENT		
178	TCLP Extraction Lead (Pb) Analysis by EPA Method 1311 and	\$/Sample	\$109
179	TCLP Extraction by EPA Method 1311 - Analysis of 8 RCRA	\$/Sample	\$243
	Metals by appropriate SW846 EPA Method		
180	Ignitability Test by EPA Method 1010 (Liquid Only)	\$/Sample	\$45
181	Ignitability Test by EPA Method 1010 Modified (Soil Only)	\$/Sample	\$45
182	Corrositivity pH by EPA Method 9045 (Soil Only)	\$/Sample	\$19
183	Corrositivity pH by EPA Method 9040 (GW Only)	\$/Sample	\$19
184	Paint Filter Free Liquids by EPA Method 9095	\$/Sample	\$20
185	PCB's Method 8082 (Soil Only]	\$/Sample	\$118
186	Lead by an approved SW846 EPA Method (Soil Only)	\$/Sample	\$34
	BIOFEASIBILITY / BIOREATABILITY ANALYSIS		
187	Phosphate-P by an approved EPA/ASTM Method (Soil Only)	\$/Sample	\$37
188	Nitrate + nitrite-N by an approved EPA/ASTM Method (Soil	\$/Sample	\$41
189	Nitrogen (Soil Only)	\$/Sample	\$43
190	Alkalinity by EPA Method 310.1 (Groundwater Only)	\$/Sample	\$20
191	Total Organic Carbon by EPA Method 415.1	\$/Sample	\$49

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Total Or	rganic Carbon by EPA Method 9060
Ammonia by EPA N	Method 350.3 or other ASTM Method
Sulfate by EPA N	Method 375.2 or other ASTM Method
Nitrate by EP	A Method 353.2 (Groundwater Only)
Alkalinity by EP	A Method 310.1 Modified (Soil Only)
Total Diss	solved Solids by EPA Method 160.1
	Total Solids Method 160.3
Biochemical Oxy	gen Demand (BOD) by EPA Method

\$/Sample	
\$/Sample	

\$62
\$29
\$25
\$25
\$21
\$19
\$19
\$46